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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,866	12/06/2001	Vijay Kumar	P04829US1	6560
22885 7590 12/21/2007 MCKEE, VOORHEES & SEASE, P.L.C.		EXAMINER		
801 GRAND			WHITE, EVERETT NMN	
SUITE 3200 DES MOINES, IA 50309-2721			ART UNIT	PAPER NUMBER
			1623	
			MAIL DATE	DELIVERY MODE
			12/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
Office Action Summary		10/007,866	KUMAR ET AL.		
		Examiner	Art Unit		
		Everett White	1623		
	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address		
Period fo	• •				
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATES IN THE MAILING DATES OF THE MAILING DA	ATE OF THIS COMMUNICATION  B6(a). In no event, however, may a reply be tim  rill apply and will expire SIX (6) MONTHS from to  cause the application to become ABANDONED	I.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).		
Status					
2a)⊠	Responsive to communication(s) filed on <u>09 Octoor</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for alloward closed in accordance with the practice under Expression 1.	action is non-final. nce except for formal matters, pro			
Dispositi	on of Claims				
5)□ 6)⊠ 7)□	Claim(s) <u>36</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed.  Claim(s) <u>36</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or				
Applicati	on Papers				
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Ex	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e37 CFR 1.85(a). ected to See 37 CFR 1.121(d).		
Priority u	ınder 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
2)  Notic 3) Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary ( Paper No(s)/Mail Da 5) Notice of Informal Pa	te		

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#### **DETAILED ACTION**

- 1. The amendment filed October 9, 2007 has been received, entered and carefully considered. The amendment affects the instant application accordingly:
- (A) Claims 1-6 and 37-40 have been previously canceled;
- (B) Claim 36 has been amended;
- (C) Comments regarding Office Action have been provided drawn to:
  - (I) 112, 1<sup>st</sup> paragraph rejection, which has been withdrawn.
- 2. Claim 36 is the only claim pending in the case.
- 3. The text of those sections of Title 35, U. S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 102

4. Claim 36 stands rejected under 35 U.S.C. 102(b) as being anticipated by Bogan et al (US Patent No. 4,590,265, already of record).

Applicants amended Claim 36 by removing text that was not supported in the instant specification, which reverted Claim 36 to claim text previously of record. Claim 36 is now drawn to a biodegradable, oxidized cellulose ester having formulas I or II

### wherein:

X is selected form the group consisting of H, Na, K, Ca, NH<sub>4</sub>, and NEt<sub>3</sub>H; whereby R is  $(CH_2)_n(COOH)$ , where n is 2 to 4; w is 0.1-1.0; x is 0.1-2.0; and n is 30-1500,

and

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#### wherein:

X is selected from the group consisting of H, Na, K, Ca, NH<sub>4</sub>, and NEt<sub>3</sub>H;

R' and R" are each selected from the group consisting of H;  $CF_3$ ,  $(CH_2)_nCH_3$ , where n is from 0 to 18;  $(CH_2)_nCOOH$ , where n is from 1 to 8; CY=CZCOOH, where Y and Z are independently selected for the group consisting of hydrogen, methyl, branched alkyl having from 1 to 20 carbon atoms and from one to three *cis* or *trans* double bonds; branched alkenyl having from 1 to 20 carbon atoms and having from one to three *cis* or *trans* double bonds;  $CY-CH_2$ , where Y is H, methyl, or phenyl; CH=CHY, where Y is  $C_6H_5$ ; CH=CYCOOH, where Y is H or  $CH_3$ ;  $(CH_2)_8(CH=CH(CH_2)_8CH_3$ ; or  $C_6H_{2-6}(COOH)_{0-4}$ ,  $CH_2CH(COOH)CH_2-COOH$ ;

w is 0.1-1.0; x' is 0.1-1.9; y is 0.1-1.9; and n is 30-850.

In view of the reversion of instant Claim 36, the rejection of Claim 36 as being anticipated by the Bogan et al patent which was previously used to reject instant Claim 36 has been reinstated. The Bogan et al patent discloses a chemical modification of a cellulose ester by oxidizing the primary hydroxyl group at the C6 position of the anhydroglucose ring of the cellulose ester to produce a carboxylated cellulose ester (see column 17, lines 44-50), which meets the carboxyl content set forth in the instant claims. See the structure of the carboxylated cellulose acetate butyrate at the bottom of column 16 of the Bogan et al patent, which anticipates the oxidized cellulose ester of formula II set forth in instant Claim 36 when X represents H; when R' and R" represent (CH2)nCH3, n is 0 or 2; when w is 1; and when x' and y are 0.1-1.9. With regard to the instantly claimed oxidized cellulose ester being biodegradable, Applicants are reminded that products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties Applicant discloses and/or claims are necessarily present. *In re Spada* 15 USPQ 2d 1655, 1658 (Fed. Cir.

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1990). See MPEP 2112.01. Accordingly, the above described carboxylated cellulose ester of the Bogan et al patent anticipates the instantly claimed biodegradable, oxidized cellulose ester for the reasons set forth herein.

5. Applicant's arguments with respect to Claim 36 have been considered but are moot in view of the new ground(s) of rejection.

## Summary

6. Claim 36, the only pending claim, is rejected.

#### Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

# Examiner's Telephone Number, Fax Number, and Other Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

E. White

Shaojia A. Jiang

Supervisory Primary Examiner

Technology Center 1600